

# **432 MHz MHz AND ABOVE EME NEWS**

**JUNE 1998 VOL 26 # 6**

**ALLEN KATZ, K2UYH**  
**Editor**

ENGR DEPT., THE COLLEGE OF NEW JERSEY, TRENTON, NJ 08650-4700 (W  
609-490-2817

OR H 443- 3184, FAX 609-443-1713, AND EMAIL:

[Allen Katz, K2UYH](#)

PRODUCTION ASSIST: **TOM KIRK, KA2VAD** (908-521-2049).

NETNEWS EDITOR: **G4RGK, DAVID DIBLEY.**

[David Dibley, G4RGK](#)

**SKEDS CORD & DIRECTORY: DL4EBY/DK0TU, KLAUS TIEDEMANN,**  
**HALSKESTR.35, D-12167 BERLIN, (49-30-7955467), E-Mail:**

[Klaus Tiedemann.](#)

**E-MAIL LIST CORD:**

[Scott KD4LT](#)

**\*\*\* NA EME BBS: 704-284-4854 \*\*\***

**EME NETS**

**14.345, 10 AM ET SATURDAYS, AFTER VARO NET SUNDAYS:**

- **NET CONTL: JOE, K1RQG** (207-469-3492), E-MAIL: [Joe, K1RQG](#)
- **EME STANDINGS: JIM STARKEY, W0KJY, 3845 CAPITOL DRIVE,**  
**FT. COLLINS, CO 80526, (970) 226-0669)**
- **THE NL WEB VERSION IS PRODUCED BY W6/PA0ZN AND**  
**AVAILABLE AT:**

## [432 MHZ AND ABOVE NEWSLETTERS.](#)

## [432 MHz AND ABOVE CHAT line](#)

## [432 AND ABOVE PHOTOGALLERIES](#)

---

# CONDITIONS

We seem to be in the dog days of summer before summer has really begun. The end of May SW did not produce particularly great conditions, but the main complaint was activity. The truth is that we have had an exciting winter and spring with lots of contests, now we need an exciting summer with summertime dxpeditions to attract the troops back to the bands. Some of these dxpeditions are happening, but there has been little in the way of fanfare to make their presence known. For example TK/DC3VW/p is on the Island of Corsica with 8 vertically stacked yagis and 200 w. Enough to easily work DL9NDD. Another possibility according to K5JL is activity from TI2NA in Costa Rico. Let's get the word out and those summertime dxpeditions rolling!

# PARIS 1998

The 8th 432 MHz and Above EME Conference is little more than a month away. Information and up-dates can be found on the conference Web page:

## [EME Paris 1998](#)

The following have registered:

**AA6IW, CT1DMK, CT1FWC, DD1XF, DF6NA, DJ6MB, DJ9BV, DK3FB, DK3WG, DL4EBY, DK4XP, DL6WU, EA3DXU, EA5GIY, F/G8MBI, F1ANH, F1EHN, F1HDD, F2TU, F3VS, F5FLN, F5HRY, F5MZN, F5PAU, F5PL, F6CGJ, F6DLA, F6HYA, G3LQR, G3LTF, G3SEK, G3TSA, G4ALH, G4CCH, G4DZU, HB9AGE, HB9BBD, HB9JAW, HB9JBL, HB9WDJ, I1ANP, I5CTE, I5TDJ, IK5WJD, K2UYH, KD4LT, NC1I, OE5JFL, OE9PMJ, OK1CA, OK1DFC, ON5RR, ON6JY, OZ4MM, PY5ZBU, RW3BP, S50X, S54X, S57UUU, SM2BYA, SM3AKW, SM6CKU, SM7GVF, VE1ALQ, VE4MA, W1QA, W2WD, W5LUU, W7CS, W7GBI, W8TN, WA7CJO and ZS6AXT plus 28 YL/XYLs and 5 children.**

There is still some room left at this time, but you need to book quickly because July and Aug are a high tourist season in PARIS. Please remember that your articles must be sent to F5HRY as soon as possible, and before 15 June (the time limit before the printing). The WEB pages have recently been updated with your

photos. Please continue to send photos (you and your antennas to F1EHN).

## SSB CONTEST

The results 1st EME SSB Contest have not changed much since the Feb NL. OE9XXI is still in 1st place with 48x13 for 624 points. (48 is 2 x the number of SSB QSOs plus 1 x the CW/SSB QSOs). Unfortunately there are a number of stations which should have scored high but never submitted their logs. OH2AXH and K2DH have to be among these. Because of this I (K2UYH) am in 2nd place with 35x9 for 315 points and W2UHI 24x10 for 240 in 3rd place followed by G3LTF with 25x7 for 175. Certificates will be awarded at the Paris Conference. The 2nd EME SSB Contest is planned for the Feb SW of '99. Is there any interest in extending the contest from 1296 to 70 cm or 13 cm?

### DD1XF

Frank was active on 1296 for the 2nd May SW. He worked the following on random: TM8EME, G3LQR and OZ6OL. All QSOs were initials. For skeds contact Frank at e-mail: [Frank, DD1XF](mailto:Frank@DD1XF)

### DF4PV

Guenter is now QRV on 23 cm and was active during the 2nd May SW. His rig at present is a 5 m dish with 70 w at the feed. Guenter plans to extend his dish to 6 m later. Guenter's e-mail address is: [Guenter, DF4PV](mailto:Guenter@DF4PV)

### HA5SHF

Csaba's (HA5BGL) group was active on 1296 on the weekend after the SW and are available for skeds. They are located in JN97mn and equipped with a 3.6 m dish with linear horizontal pol, 100 w at the feed and a FHX35 preamp. They follow the Moon by a telescope, so they can only operate at night when it is dark. Csaba is interested in skeds with "bigger" stations and can be reached by e-mail at: [Csaba, HA5BGL](mailto:Csaba@HA5BGL)

### IK5QLO

Andrea (JN53fu) writes -- I found excellent 432 conditions in the presked weekend (perigee), but very low activity. Anyway I was very happy because I worked 2 more 4 yagis stations with my 2 x 28 el 9 wl yagis and 800 w. It is interesting what QRP can do if one finds the right polarization shift HI! I worked on 23 May K5JL (539/559) UFB for initial #26, W7QX (O/O) #27 - my 2nd 4 yagis station, heard was K7XD (M/-) and nil KB3PD due to local QRM but he copied me, on 24 May W7CNK (O/O) #28 - my 3rd 4 yagi QSO, and 31 May

**OE5EYM (539/O)** on random and nil F1AHN. My homepage is:  
[IK5QLO's Homepage](#)

### **K1FO**

Steve has been extremely busy with little time for EME or ham radio in general. He spent quite a bit of time this spring looking for land to build a new house. If he were to put up his 28' Kennedy dish at his present location he would have a limited window due to tree blockage. Unfortunately, the only property that he was able to find that met all the requirements, dish window, good tropo location, buildable lot and plenty of privacy was quite a bit farther out in the country than where he presently lives and not where either he or his wife want to live. At his present location there are only 5 houses within a half mile (.8 Km) radius. Most of the surrounding land is part of a water reservoir and open space land trust, very good for ham radio. He is now planning on expanding and remodeling his present house. The job of developing the plans and finding a contractor has more recently occupied his time. The plans include building a new larger shack on the 1st floor to replace his somewhat small shack over the garage. If he proceeds ahead with the plans his present shack will have to be dismantled before the renovations start. In addition all the feedlines will have to be dug up putting him off the air for several months. He and his wife are attempting to make a decision as to whether the results of the remodel will be worth the pain of doing it. In addition to the house work he has been very busy at work and with Lunar-Link Systems. Steve was up at the Rochester, NY hamfest and chewed the fat with the 70 cm and up EMEers who were there. Stations worked past months were on 8 Mar **I5TDJ** and **WB0GGM**, on 4 Apr **K5WXN**, **DF3RU** and **DL4KG**, on 30 Apr **W7CNK**, **KA0RYT** and **JA5OVU**, exchanged grid squares with **KA0RYT** and **JA5OVU** for the 432 ARRL Spring Sprint Contest, on 1 May **VK4KAZ (M/O)** **#533**, **DL9KR**, and **W7CNK**, on 2 May **JA9BOH**, **K7XD**, **N2IQU**, **JA3SGR**, **JA3IAF**, **JH4JLV** and **JJ1NNJ**, on 31 May **K5JL**, **W7CNK** and **JA5OVU**, and on 7 June **W7CNK**. Steve's polarity rotor (an HDR- 300) again has output shaft keyway problems and now has at least 45 degs of backlash in it. He is just about giving up on the HDR- 300 as he feels the only way to fix the problems would be to go to a spline output shaft and gear, but he has been able to find suitable parts. Steve is considering using a prop pitch motor for polarity rotation, but it would require quite a bit of modification to his mount, plus they are slow and noisy. He looked at the M^2 worm drive rotor, but it is too high to fit into his mount. He is considering trying a Yaesu G-2800SDX rotor. On paper the braking torque looks very impressive, but the motor turning torque looks a bit marginal. He wonders if anyone has any experience with the G-2800SDX rotor? Steve's 70 cm EME totals are: **#532** initials, 49 states and 75 DXCC. Svetlana is just now shipping their long awaited version of the 3CX800A7 triode. He has been testing a pair of Svetlana tubes in an LA-70B, 70 cm amplifier. Initial tests look encouraging, the Svetlana tubes are very stable in terms of power output, operating just like a HF

amplifier. They bias slightly different than the Eimac tubes, however and require more drive power. Lunar-Link Systems is now stocking both Eimac 3CPX800A7 pulse rated tubes and Svetlana 3CX800A7/3CPX800A7 tubes.

### **K3HZO**

Harry is using a 3.2 m dish and 200 w on 1296 and writes -- I now have a max of 65 degs of elevation available so I can now take stateside skeds on 1296. I am good until I reach an azimuth of 205 deg where I am blocked by trees. One short window remains for me from 255 to 265 deg for above 35 degs of elevation. During the SW I worked **K4QI 429**), **EA6ADW** (O), nil EA3UM, PA3CSG (439), nil I6QGA, nil F2TU, nil GW3XYW, nil N2IQU, **N6BQ (O)** and **K2UYH (549)**. Overall I worked every station heard, had 5 no shows on skeds and QSO'd 3 on random. My initial count is now 25.

### **K4QI**

Russ writes -- I was on 1296 over the activity weekend for a couple of short periods. Conditions seemed fairly good. I worked on 30 May **W2UHI**, **N6BQ**, **DD1XF**, **OZ6OL** for an initial (#), **DF4PV** #, **K3HZO** #, **DF3RU**, **OK1KIR**, **OZ4MM** and **PY5ZBU** #, and on 31 May **W2UHI**, **HB9BBD** (very loud) and **K2UYH**. Around 2020 on 30 May, I heard someone calling several times. They were very weak and sending very slow. With the slow CW, the libration chops a weak signal up to the point you really cannot copy anything. I missed the TM8EME tests last month because of very high winds the whole weekend. [Russ can be reached on e- mail at [Russ](#), [K4QI](#)]

### **KL7HFQ**

Roger is presently not QRV due to the passing of his aunt. He is not sure when he can get back on. He is involved with settling her affairs. She was a teacher from 1944 to 1974 in Anchorage and amassed a lot of things, many of which are turning out to be historical in nature. Roger notes -- I'm sorry that this is happening but will let you folks know when I can get back on. Please let the gang know that I do not want any schedules as of yet. I don't want hurt feelings when I don't show up or don't answer my e-mail right away. I have had almost 50 messages alone. [You have the sympathy of the EME gang. We understand the situation and will be around when you are ready for the Moon again.]

### **KU3T**

Joe is QRV on 70 cm with 4 yagis and now has an LA-70 online running 1500 w. He worked **DL9KR (569)** on 2 May at 2200, but heard nil from DL9NDD on 3 May. You can reach Joe at:  
[Joe](#), [KU3T](#)

### **N6BQ**

Hoppy's 23 cm activity report for May follows -- I QSO'd on 11 May **W2UHI**, on

23 May DJ9YW and OZ6OL for initial #122, on 24 May W2UHI, DL6YDH, DH0OAH #123 and DJ9YW, on 30 May W2UHI, KD4LT and K4QI, and on 31 May JA6CZD, W2UHI, W7GBI, HB9BBD, G3LTF, K2UYH, OE9ERC and K3HZO #124 . I had a near miss with K9BCT on schedule. No contact since I never copied Randy's Rs. Also I didn't hear anything from 9H1ES on schedule. I increased anode voltage on the TH-327 PA to 3.0 kV dc under load and ran 1.5 kW output for several hours straight with no big bangs! I ran approx 1.3 kW during the entire weekend with very stable operation. The new method of disabling HV and Esg during RX seems to be working. A new feed, VE4MA with built-in polarizer section and 7/16 connector on TX port is almost ready to be installed.

#### N7LQ

Shawn is now QRV on 432 from DM09 (Reno, NV). He is believed to be running close to the legal limit into 4 x 25 el FO yagis. Ron, KA0RYT reports working Shawn (M/O) and says he will be temporarily down to move his array to a rarer grid for the ARRL June contest - portable style.

#### OK1DFC

Zdenek sends the following report on his 1296 activity during the 30/31 May SW -- I worked OZ4MM (O/M), OK1KIR (O/O) and HB9BBD (559/539) - very strong signal with peaks to 579. Heard were ON5RR, OZ6OL, K4QI, DF3RU, N6BQ, LU6DW, OE9XXI and OH2DG. I used 150 w. I have a new preamplifier made by OK1CA with 0.5 dB NF. Receiving side is thereby very much better. In next 2 windows, I am sorry to say, I will not be active. I will work on completing a higher power amplifier with a TH338 for the next time I am able to be QRV.

#### ON5RR

Marc, just back from the Italian EME convention, writes -- We intended to work all our skeds, but had problems. When we came on we heard HB9BBD with an outstanding signal. His 10 m dish is doing a great job! It was easier to work Dominique than ever before. Then I got on the sked freq, but during echo testing the EHT of the driver blew. I tried a backup one, but the only thing it wanted to do was oscillate. It even killed the OZ9CR amplifier... Finally I used my 1st amplifier (2x2C39). With reduced drive and EHT I could only make about 60 w. I could hear my own echoes, but nil on all skeds. I heard very weakly PY5ZBU and worked some big guns. We are busy making repairs and hope to be active in June.

#### OZ4MM

Stig was QRV on 1296 for the SW -- I worked some stations, but didn't find activity too good. Conditions like activity seemed down. QSO'd on Saturday were HB9BBD (57/56) on SSB, DF4PV (529/449) for initial #140, JA6CZD (559/569), DF3RU (549/569), OK1DFC (M/O) - much weaker than normal, OZ6OL



(549/559), IK2RTI (439/549) #141, LU4DHD (O/549) #142 DXCC 36 and JR9NWC (M/O) #143. Back in beginning of May I worked TM8EME (59/58) on SSB. Concerning my e-mail address, there was an error in last NL! The address should be:

Stig, OZ4MM

#### PA0EHG

Hans writes -- I was QRV for the TM8EME tests and received good signals from them but did not succeed in making a contact. Several lessons were learned. Misalignment of the dish was the 1st and biggest mistake. Measuring the Sun noise helped me discover the alignment problem. 2nd was the NF of my preamp. Measuring only 8 dB of Sun noise indicated that much improvement could be realized in building a new preamp. I am building a DJ9BV design with a HEMT to replace the old MGF1302 preamp. The biggest surprise was that during the TM8EME activity I heard several other stations on the same frequency as TM8EME. This gave me my last lesson that my CW knowledge must be improved. Activity from my side will be to build a dish and perhaps do some tests with my 2.5 m dish. The spark is glowing and something will result.

#### SV1BTR

Jerry heard nil on 23 May from W7CNK, HP3XUG and K5JL. He notes that he will be away in SV9 from 29 May to 2 June for a 2m EME and MS dxpeditions. He will be again QRV on 70 cm on the weekend of 20-21 June. On the weekend of 27/28 June he will be away from Athens on a business trip.

#### W7EME

Jeremy in ID (DN14wv) is just about set for EME operation on 70 cm with 8 x 432cp42ug modified cross yagis and 800 w from a pair of 4CX250Rs. Jeremy has stereo RX via FT1000mps, dual stage preamps and separate feeders. He notes that 222 and 13 cm EME are in the works, but that 23 cm is on the back burner. He expects to be QRV in June pending some tree removal. His address is (Jeremy Alexander, PO Box 1818 McCall, ID 83638), tel 208-634- 4466 and e-mail:

Jeremy, W7EME

[PA problems have delay Jeremy, but he expects to be QRV very soon.]

#### K2UYH

I was only able to be on one day during the SW and chose to try 1296 as I was on 432 last month. Conditions did not seem very good, but I did QSO on 31 May at 1921 HB9BBD (57/54) on SSB with an immense signal, 1944 OZ6OZ (549/559) for initial #153, 0200 K4QI (559/559), 2021 K3HZO (549/O) #154, 2032 N6NB (559/549), 2043 G3LTF (559/549) and 2100 OE9ERC (56/56) on SSB. I was again on 1296 the post SW and worked on sked on 6 June at 2330 HA5SHF (O/O) for #155 and DXCC 37. Signals were up and down due to tree blockage at the low declination. I used circular pol even though HA5SHF was linear as I did not read

his e-mail carefully. Afterwards, at 0010 W2UHI was QSO'd (55/44) on SSB, but signals were erratic due to the tree problems. I also ran several skeds with VK4KAZ on 432, but only copied pieces of calls. My window to the west has just about disappeared! I may have to wait until the leaves come off the trees before I can work him.

---

## NETNEWS

by G4RGK

EA3UM has been away on business travel. Magi was unable to make his skeds with SV1BTR and WB0GGM and sends his apology.

WD5AGO is looking for an Australian station on 23 cm.

K2DH plans to try with AF1T on 903 and then he will put the 23 cm feed in for the June SW and will migrate to 13 cm.

N7EIJ has 8 yagis from N7ART and hopes to be QRV on 70 cm by end of the summer. He still needs a PA.

W4HHK had a visit from W5LUA and W5ZN on their way to Dayton.

9H1PA has a 2 m solid dish with a .4 f/d. He plans EME on 1296.

DL9KR, worked VK4KAZ for initial #691 and KU3T #692. Jan is looking for a sked with WA6YDI. He reports TK/DC3VW/P has worked DL9NDD quite easily with 8 vertically stacked yagis and 200 w. Jan is also looking for info on W6ZL.

K6IBY needs a couple RCA 4634 tetrodes and then will be QRV on 432 EME. Joe reports that Fresno State college is putting together multi band EME station with a 6 m beam with a 70 foot boom, 4 x crossed yagis (K6MYC) for 2 m, 4 x M2 24' long on 220 and multi yagis on 70 cm. Hams involved in this project include WA6YDI and K6MYC.

ON4KNG completed with SV1BTR.

DH0MBH has 6 yagis on 70 cm.

W2UHI worked OZ6OL for a new one on 1296 in May.

VE1ALQ's new dish will be in the air in about 2 weeks. The dish is a 12' TVRO for 5.7 GHz and above.



**KA0RYT** worked **GW3XYW** for a new one and also **W7CNK**, but did not complete with **OE3JPC**.

**HB9BBD**'s new dish is working very well. Dom has worked 60 QSO with it thus far.

**W0RAP**'s dish is up but not operational yet. Bob will be working on the dish actuators now that the **WX** is better.

**W4OP** heard **WA9FWD** and **K3HZO** on 23 cm. He has 700 w out and will be look for them on random.

**HP3XUG** did not hear **SV1BTR**. Louie did heard **W7CNK** twice, but did not complete.

**K7XD** did not complete with **KB3PD** and **IK5QLO**.

**PA3CSG** has 15 dB of Sun noise with his 3 m dish on 10 GHz and is working on the TX side.

**9H1ES** has not sent out QSL cards yet. He will try to send the QSLs in next 2 weeks. He had a very fine QSO with **HB9BBD** on 10 May. He plans to build a bigger dish.

**W5ZN** is QRV on 70 cm and 6 cm and is looking for skeds. He will be moving to 23 cm soon. He still needs **VE4MA** on 902.

**NU7Z** worked **AF1T** and **WA8WZG** on 903.

**AF1T** has worked on 903 **WA8WZG**, **NU7Z** and **K2DH** and tried with **VE4MA**, but heard nil.

**N2HLT** has 4 x **RIW** yagis and 600 w, but is planning to take them down and put up 8 x **K1FO** yagis.

**WA8WZG** has worked **AF1T** and **NU7Z** on 902 and is moving to 5760.

**W2UHI** missed his **DH0OAH** sked, but did work **N6BQ** and **DF4PV** for a new one on 1296. Frank had some minor problems with dish control, but now has resolved them.

**K5JL** has finally worked **SV1BTR**. Jay had a tornado pass a couple of miles to the north. Jay reports that **TI2NA**, Eric, has 4 yagis and needs encouragement to get back on 70 cm.

W7FN is recovering from an operation and not QRV at the moment.

K9BCT had a sked with N6BQ. He had easy copy on his end, but had to leave to catch a plane. His diagonal horn is now working very well.

WB0TEM plans to be active again on EME. It will take Mark a few hours to get his dish back in service, but work has begun. He expects to be QRV by autumn.

VE4MA is thinking of firing up on 24 GHz pretty soon.

LX1DB worked OE9ERC on 5.7 GHz.

W6/SM0PYP Paul has a new address (P. Chominski, 17433 Gibraltar Court, San Diego, CA 92128), tel/fax: 619-676-0381 and e-mail:

[Paul, W6/SM0PYP](#)

---

## FOR SALE

KU3T has for sale a [3CX800A7 Power Amplifier based on the Henry amp with manual. Output is 700 w.](#) The price is \$800 USD including shipping in the US.

You can reach Joe at:

[KU3T](#)

N7EIJ is [looking for a 70 cm PA](#) .

WB2GLW [needs 10' of 10 GHz cable with connectors, loss must be less than 4 dB.](#) He also has for sale a Transco TR Relay with N connectors and dual coil \$US40, [Andrews WR75 90 degree bend PN 55221-75 E708D \\$US25](#) and [WR 75 Dummy Load \\$US20.](#) E-mail to Mike at:

[WB2GLW](#)

or phone (516) 582- 5246.

NA4N is [looking for a 12' dish.](#)

W7EME is [looking for a manual or reprint for a microwave test set "TS-130A/UP".](#) He is also [looking for the little bolometer](#) that went with this unit.

Contact Jeremy at:

[W7EME](#)

KB2AH has a full line of cavity amps and 1, 2, 4 and 6 tube ring amps, [lin/circular feed horns and LNAs for 432 and 1296.](#) Tom also has [mounting blocks for K1FO yagis](#) . For full details see Tom's 1296 WEB page:

[TOM, KB2AH Web Page](#)

for more details and pricing info e-mail:

[Tom](#)

or phone 908-223-5067, FAX 908-223-0901 (24 hrs) or voice 908-223-8124.

---

## TECHNICAL

This month we have a modification for the [UPX-4 and similar 6 tube ring amps from G3LTF](#). Peter writes -- for sometime I have struggled with various input circuit arrangements for my home brew 6 tube 3CX100A5 amp. I used loops and direct ground taps from the sidewall, but I believed these all upset the symmetry of the cavity operation. I recently changed to a direct tap on the central tuning slug. This seems to do the job with much better balance of currents in the tubes - see the diagram at the end of this NL. The dimensions are approximate. You may have to experiment.

Also in this NL is the [list of stations on microwave EME prepared by NU7Z](#).

[JF1EFA with 4 x 26el K1FO Array](#)

[JF1EPA's Solid State 432 HPA](#)

8 x 2C33102 for 600 W Output at 432 MHz.

## FINAL

This month there was only a 3 week turn around between SWs. Unfortunately we have to leave for a business trip on the weekend we would normally prepare the NL. Thus the NL is a week later than normal. I am sorry for this delay, but there was nothing I could do. The rest of the summer does not look much better. We will be away on another trip at the end of June and the will be gone again for several weeks for the PARIS Conference.

Recordings of the TM8EME QSOs have been uploaded to the WEB by F5MZN. Samples of all QSOs are available. The records are saved as WAV format, 8 KHz, 8 bits, mono. If you want to hear your signal or one of the others, connect to:

[TM8EME Sound clips](#)

and then after entering one directory, click on the file you want to listen. It can take some time before being able to listen a particular record. It depends of the

file length and of the date rate available to you.

Thanks for the technical material and reports. Please keep the information coming. . I should be QRV in June SW and will be looking for you off the Moon.



---

432MHz & up EME skeds

JUN 20

Time	432.040	432.045
0130z	JA5OVU-VK4KAZ	
0200z	DK3WG -VK4KAZ	
0230z	SM2CEW-VK4KAZ	
0300z	SV1BTR-JA5OVU	
0800z	SV1BTR-YO2IS	
0900z	KB3PD -SV1BTR	
1000z	KB3PD -RW4AQ	W0KJY -SV1BTR
1030z	WA8WZG-SV1BTR	
1100z	LU4HO -OK1KIR	KB3PD -HA1YA
1130z	WB0GGM-OK1KIR	W7CNK -SV1BTR
1200z	KB3PD -EA8FF	K7XD -S52CW
1230z	KB3PD -S52CW	K7XD -DL4MEA
1300z	KB3PD -PY5ZBU	W7CNK -S52CW
1330z	W7CNK -PY5ZBU	K7XD -G3LTF
1400z	KL7HFQ-W5ZN	W7CNK -HP3XUG
1500z		W7EME -K7XD
1530z	KB3PD -KD4LT	N7LQ -K7XD
1600z		KL7HFQ-K7XD
1830z	K2UYH -VK4KAZ	
1900z	VK4KAZ-KD4LT	
1930z		K7XD -K1OR
2000z		JJ1NNJ-K7XD

JUN 21

Time	432.040	1296.050	1296.075
0300z	OE5JFL-VK4KAZ		
0930z			VE1ALQ-DF4PV
1000z		DH9FAG-OK1KIR	VE1ALQ-OZ6OL
1030z		DD0SB -OK1KIR	VE1ALQ-HA5SHF
1100z	W5ZN -W1ZX	9H1ES -OK1KIR	VE1ALQ-DJ5MN
1130z			VE1ALQ-DL6YDH
1200z		PY5ZBU-OK1KIR	KB0PYO-DJ9YW
1230z		WA9FWD-OK1KIR	K3HZO -F2TU
1300z		K3HZO -OK1KIR	VE6TA -DD1XF

1330z	K9ZZH -OK1KIR	K3HZO -EA3UM
1400z	NP4B -OK1KIR	K3HZO -GW3XYW
1430z	VE6TA -ON5RR	K3HZO -K2DH
1500z	VE6TA -KD4LT	K3HZO -PY5ZBU
1530z	VE6TA -PY5ZBU	K3HZO -WA8WZG
1600z	VE6TA -WA8WZG	
1630z	VE6TA -W4OP	

---

## **[Leave Contest Info or Comments to Allen Here](#)**

---

This information was obtained from: [Scott, KD4LT](#)

---

[Top Page](#)

---

For Comments or corrections: [Rein, W6/PA0ZN](#)

---